

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

James A. Macove

Application No. 10/750,244

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Art Unit: 3724

For: RAZOR HAVING SEPARATE BLADE
GROUPS FOR SHAVING AND
TRIMMING/SCULPTING

Examiner: Jason D. Prone

Boston, Massachusetts
November 25, 2008

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APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37

TABLE OF CONTENTS

I.	REAL PARTY IN INTEREST	1
II.	RELATED APPEALS AND INTERFERENCES	1
III.	STATUS OF CLAIMS	1
IV.	STATUS OF AMENDMENTS	1
V.	SUMMARY OF CLAIMED SUBJECT MATTER.....	1
A.	Independent Claim 21 Recites a Specific “Working Plane” Configuration.....	2
B.	Independent Claim 41 Recites a Working Plane Configuration and also a Thin Profile Leading-Edge Blade Guard for the Second Blade Group.....	3
VI.	GROUND OF REJECTION TO BE REVIEWED ON APPEAL	4
A.	Rejections Under 35 USC §103 of Claims 21, 22, 24-27, 30-32, and 40	4
B.	Rejections Under 35 USC §102 of Claims 41-44	4
C.	Rejections Under 35 USC §112 of Claims 40-44	4
VII.	ARGUMENT.....	5
A.	To Rebut the Obviousness Rejections, It is Important to Understand the Context in Which the Invention was Made	5
1.	The Problem Addressed by the Invention Is the Cumbersome and Sometimes Hazardous Manipulation of Multiblade Razors for Trimming	5
2.	The Invention Solves the Problem by Providing One or More Trim Blades on One Side of the Razor Head in a Configuration for Convenient, Easy-to-Use and Effective Dual-Purpose Shaving.....	7
B.	Neither Claim 21 Nor the Claims Depending Therefrom Are Obvious Over Rozenkranc under 35 U.S.C. § 103	8
1.	Rozenkranc Discloses Only a Different Configuration Than Claim 21.....	8
2.	The Market Provides Evidence of the Distinct Superiority of Applicant’s Configuration as Compared to Rozenkranc	11
3.	The Examiner’s Reliance on <i>In re Aller</i> and WO94/26476 is Inappropriate	13
4.	Claim 30, Describing a Concave Handle Curvature, is Further Patentable Over Rozenkranc	17
5.	Claims 31 and 40, Describing a Thin Leading Edge Blade Guard for the Trim Blade Group, are Further Patentable Over Rozenkranc	18
C.	Neither Claim 41 Nor the Claims Depending Therefrom Are Anticipated By Rozenkranc under 35 U.S.C. § 102	20
1.	Rozenkranc Does Not Provide a Thin Blade Guard.....	21
D.	Neither Claim 41 Nor the Claims Depending Therefrom Are Indefinite under 35 U.S.C. § 112	24
VIII.	CONCLUSION	25

I. REAL PARTY IN INTEREST

The real party in interest is the inventor James A. Macove. No assignment of this application has been made by the inventor.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Claims 21, 22, 24-27, 30-32 and 40-44 are currently pending in the present application. According to the Final Office Action mailed on November 27, 2007, each of claims 21, 22, 24-27, 30-32 and 40-44 stand finally rejected. Accordingly, claims 21, 22, 24-27, 30-32 and 40-44 are subject to this appeal.

Claims 1-20, 23, 28-29, 33-39, and 45 are canceled.

IV. STATUS OF AMENDMENTS

Applicant has submitted an amendment to amend claim 41 to address the section 112 issues raised by the Examiner in the latest Office Action. This amendment is provided only to simplify the issues on appeal and no new matter is added. In addition, Applicant has submitted evidence, including the pictures of Gillette and Schick razors provided in the argument below. Applicant submits that both the amendment and the evidence should be admitted for the reasons stated in those papers.

V. SUMMARY OF CLAIMED SUBJECT MATTER

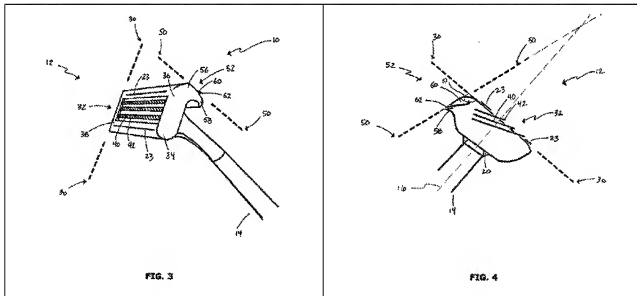
The present invention provides a single razor head having a primary group of blades on a first common plane on a front face of a shaver head (the primary group of blades being for shaving broad, relatively flat areas of hair) and a secondary blade group on a second common plane located on a top or top-back edge of the shaver head, where the second common plane is separate and distinct from the first common plane. The secondary blade group is a trim blade group for precise shaving in confined, contoured, hard-to-reach areas, especially around the nostrils, in crevices such as chin clefts, and around the edges of sideburns, mustaches and beards.

A. Independent Claim 21 Recites a Specific “Working Plane” Configuration

Claim 21 recites a single razor cartridge 12 for use with a handle 14 for providing both broad area shaving 32 and trim shaving 52 blade groups within a single cartridge. [Page 17, line 28 to page 18, line 11.]

The razor cartridge 12 defines a handle axis 16 (page 19, lines 12-22), and includes first 32 and second 52 blade groups. [Page 18, lines 6-11.]

The first blade group 32 has a plurality of razor blades 40 configured to provide broad area shaving in a first working plane 30, where the first working plane 30 is defined by a blade platform 34 having leading and trailing glide surfaces. The first working plane 30 intersects the handle axis 16; and the plurality of razor blades 40 in the first blade group 32 are angled at an acute angle with respect to the first working plane 30 in a direction of broad area shaving. [Page 18, line 28 to page 20, line 5; also page 4, lines 11 to 21; page 15, lines 1 to 19; and page 18, lines 12 to 27; and generally Figures 3 and 4, reproduced below.]



The second blade group 52 has at least one razor blade 60 configured to provide trim shaving in a second working plane 50, where the second working plane 50 is defined by a blade platform 54 having leading and trailing glide surfaces. The second working plane 50 intersects the handle axis 16; and the at least one razor blade 60 in the second blade group 52 is angled at an acute angle with respect to the second working plane 50 in a direction of trim shaving. *Id.*

Importantly, the first 30 and second 50 working planes intersect each other so as to define a line of intersection that is substantially transverse to the handle axis 16 and the first and second working planes intersect at an included angle θ between about 75 degrees and 135 degrees. [In particular, page 19, line 18 to page 20, line 5.]

B. Independent Claim 41 Recites a Working Plane Configuration and also a Thin Profile Leading-Edge Blade Guard for the Second Blade Group

Claim 41 recites a razor system 10 for providing both broad area shaving 32 and trim shaving 52 blade groups within a single cartridge 12. The system includes an elongate handle 14 defining a handle axis 16 and a razor cartridge 12 disposed on the handle 14. [Page 17, line 28 to page 18, line 11.]

As with claim 21, the first blade group 32 has a plurality of razor blades 40 configured to provide broad area shaving in a first working plane 30, where the first working plane 30 is defined by a blade platform 34 having leading and trailing glide surfaces. The first working plane 30 intersects the handle axis 16; and the plurality of razor blades 40 in the first blade group 32 are angled at an acute angle with respect to the first working plane 30 in a direction of broad area shaving. [Page 18, line 28 to page 20, line 5; also page 4, lines 11 to 21; page 15, lines 1 to 19; and page 18, lines 12 to 27; and generally Figures 3 and 4, reproduced above.]

Again similar to claim 21, the second blade group 52 has at least one razor blade 60 configured to provide trim shaving in a second working plane 50, where the second working plane 50 is defined by a blade platform 54 having leading and trailing glide surfaces. The second working plane 50 intersects the handle axis 16; and the at least one razor blade 60 in the second blade group 52 is angled at an acute angle with respect to the second working plane 50 in a direction of trim shaving. *Id.*

The first 30 and second 50 working planes intersect each other so as to define a line of intersection that is substantially transverse to the handle axis 16 and the first and second working planes intersect at an included angle θ between about 75 degrees and 135 degrees. [In particular, page 19, line 18 to page 20, line 5.]

In this configuration, the first 30 and second 50 working planes intersect each other so as to define a line of intersection that is substantially transverse to the handle axis 16 and the first and second working planes intersect at an included angle θ between about 0 degrees and 150 degrees. [In particular, page 19, line 18 to page 20, line 5.]

Importantly for claim 41, the second blade group 52 further includes a blade platform 54 and a leading-edge blade guard 58, the blade platform 54 and blade guard 58 being provided along with the at least one razor blade 60 on the second working plane 50, the leading-edge blade guard 58 having a thin profile to allow a distance between the at least one razor blade 60 and an individual's skin to be optimally minimized to facilitate shaving in confined hard-to-reach areas of the individual's skin. [Page 15, lines 11-19; page 17, lines 1-4; and page 18 lines 12-17.]

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Rejections Under 35 USC §103 of Claims 21, 22, 24-27, 30-32, and 40

The Examiner has rejected claims 21, 22, 24-27, 30-32, and 40 under 35 USC 103(a) as being unpatentable over Rozenkranc (U.S. 6,276,061) in view of WO 94/26476.

B. Rejections Under 35 USC §102 of Claims 41-44

The Examiner has rejected claims 41-44 under 35 USC 102(b) as being anticipated by Rozenkranc (U.S. 6,276,061).

C. Rejections Under 35 USC §112 of Claims 40-44

The Examiner has rejected claims 40-44 under 35 USC §112, second paragraph, as being indefinite.

VII. ARGUMENT

Applicant traverses each of the bases for rejecting the claims.

A. To Rebut the Obviousness Rejections, It is Important to Understand the Context in Which the Invention was Made

To fully understand the claimed invention, it is first necessary to appreciate the state-of-the-art at the time of Appellant's invention, which represents the background against which the claimed invention was developed.

1. The Problem Addressed by the Invention Is the Cumbersome and Sometimes Hazardous Manipulation of Multiblade Razors for Trimming

Conventional razors are typically made with one or more parallel strip-like razor blades positioned on a single common working plane and secured upon the head of the razor. A handle extends from the head of the razor. The individual who wishes to shave with the razor holds the handle and ordinarily scrapes or moves the head of the razor in one direction at a time along the skin such that the blade or blades cuts the hair. [¶0008 as published.]

In recent years, typical razor blade systems comprise at least two or more parallel strip-like razor blades positioned closely to one another on a common working plane. Several systems on the market at the time of filing of the priority application had three cutting blades on the working plane, and it was possible to add a fourth and successive blades to the razor head assembly. These parallel-blade constructions are used in shaving systems that may be, for example, a disposable shaving cartridge adapted for coupling to or uncoupling from a reusable razor handle, or a shaving head which is integral with a razor handle so that the complete razor is discarded as a unit when the blade or blades become dulled. In many of these systems, the parallel strip-like razor blades are encased in a razor head or cartridge which provides a fixed orientation of the blades to the skin through the use of leading, trailing and glide surfaces which define a working plane of the razor head. These various surfaces of the head all bear against the skin being shaved, and thus ensure the sharpened edges of the blade strips are presented at the proper angle to skin being shaved. In the case of each of these parallel strip-like razor blade systems, the first blade is intended to give a rough cut, and the second or successive blades give a

closer cut to provide the individual being shaved with a closer, smoother shave. [¶ 00010 as published.]

However, there are unexpected deficiencies with these recent conventional blade designs. Unlike earlier razor designs such as the single blade edge razor that did not incorporate either the ribbed skin-engaging strip to grab hair or the lubricating glide strip to provide additional comfort or skin conditioning, the design of the multiple blade razor head containing these additional elements dictates that the cutting blade or blades be significantly offset from the parallel edges of the razor head. When the cutting blade or blades are significantly offset in this manner, they are positioned near the center of the shaving head and away from the leading or trailing edges of the shaver head. While this design in general offers the individual a closer and more comfortable shave for shaving broad areas of the face, it also necessarily creates a deficiency and usability shortcoming by limiting the individual's ability to use the shaver to reach into confined, hard-to-reach and delicate areas of the face and body such as under the nostrils, in chin clefts, around mustaches and on sideburn and beard edges and the like with precision and accuracy. In practice, the edges of the razor cartridge holding the ribbed strip and lubricating strips "get in the way" or "block" the blade cutting edge's access to confined body areas. The individual must then attempt to push and wedge the razor cartridge into the confined area. This difficult maneuvering process of the razor is cumbersome for many individuals and often results in an inability to cut the targeted hair. Additionally, in the case where the individual is overly persistent in attempting to position the razor into these confined areas, skin irritations and sometimes skin abrasions or lacerations may be produced. See, for example, U.S. Pat. No. 5,784,790 to Carson III et al., wherein a razor head assembly that exhibits the characteristics and shortcomings described above is disclosed. [¶ 00020 as published.]

Thus, it may be said, that the new generation of multiple-blade razors comprising two, three, or more parallel in-line blades and comfort/lubricating strips provide superior shaving closeness and comfort in broad open areas but make shaving confined, hard-to-reach areas difficult and cumbersome. [¶ 00021 as published.]

2. The Invention Solves the Problem by Providing One or More Trim Blades on One Side of the Razor Head in a Configuration for Convenient, Easy-to-Use and Effective Dual-Purpose Shaving

The claimed invention overcomes the trimming and sculpting efficacy shortcomings of prior shaving razor system designs while at the same time retaining the benefits of those designs; that is, providing closeness and comfort in shaving broad areas of the face. In practice, the claimed invention provides an individual the working elements of both a multi-blade razor for broad area shaving and a thin trimming razor. Still further, all of these benefits are provided in single shaving device design that delivers the benefits afforded by each in an easy to use configuration for the shaver. [¶ 00032 as published.]

The claimed invention is therefore concerned with providing an improved shaving and trimming/sculpting razor system, by providing a novel blade cartridge constructed to satisfy the aforementioned needs. In particular, the present invention comprises a razor cartridge construction having a base structure that is handled in a manner generally similar to popular multi-blade razor designs, but further comprises a separate stand-alone trim blade “group” (which comprises at least one blade) added to the top or top-back edge of the shaving cartridge. Accordingly, in exemplary embodiments of the present invention, on a single razor head, a primary group of blades on a first common plane on the front face of the shaver head is utilized for shaving broad, relatively flat areas of facial hair, as is consistent with existing multi-blade designs, and, on the same cartridge head, there is comprised a secondary blade group positioned on a second plane, wherein the second plane is a separate and distinct working plane configured ideally for precise shaving in confined, contoured, hard-to-reach areas, especially around the nostrils, in crevices such as chin clefts, and around the edges of sideburns, mustaches and beards. [¶ 00033 as published.]

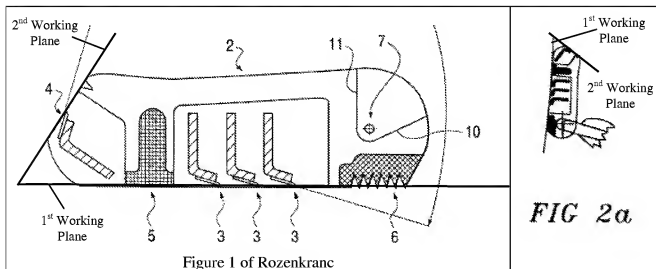
Therefore, the present invention substantially reduces the disadvantageous features inherent in both single blade and multiple blade razor designs by providing the individual with a convenient, easy-to-use and effective all-in-one, dual-purpose razor for shaving broad areas and trimming/sculpting confined areas of facial and/or body hair. [¶ 00034 as published.]

B. Neither Claim 21 Nor the Claims Depending Therefrom Are Obvious Over Rozenkranc under 35 U.S.C. § 103

As has been noted above, the geometry of the claimed razor system is critical to its success as a trimming and shaving device. In particular, the angle between the working planes is a further critical aspect of this geometry. Applicant has used the angle between these working planes to clearly distinguish the cited Rozenkranc reference. The Examiner has not disputed that Rozenkranc does not disclose Applicant's invention.

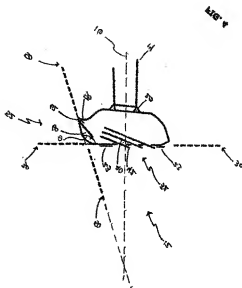
1. Rozenkranc Discloses Only a Different Configuration Than Claim 21

Rozenkranc provides a distinctly different geometry that works differently than Applicant's. In particular, Rozenkranc provides a much greater angle between the working planes, a decision that has implications for the configuration of the entire razor, including the design of the handle and its relationship to the blade head. Turning now to the Rozenkranc patent, Applicant reproduces below Figures 1 and 2A from that patent and highlights the first and second working planes in the Rozenkranc Figures:



A review of these Figures shows that the angle between the first and second working planes in Rozenkranc is well outside the recited range of between about 75 and 135 degrees. The difference between illustrated embodiments of Rozenkranc and Applicant can be seen most clearly by comparing Figure 1 of Rozenkranc above with the version of Figure 4 of the present

application below which has been flipped and rotated to take the same orientation as the Rozenkranc figure – the geometry is very different:

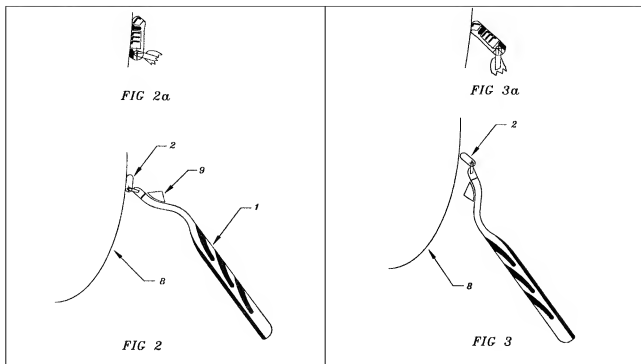


Further, Rozenkranc suggests no variation in the angle between the working planes and never recognizes its importance. Instead, Rozenkranc focuses exclusively on the angles of the blades, not the working planes. The Examiner expressly recognizes that Rosenkranc does not teach the critical geometry of Applicant's claimed device:

However, in regards to claims 21 and 40, ***Rozenkranc remains silent with respect to the first and second working planes intersect at an angle between about 75° and 135°.***
[November 27, 2007 Final Office Action at p. 6.]

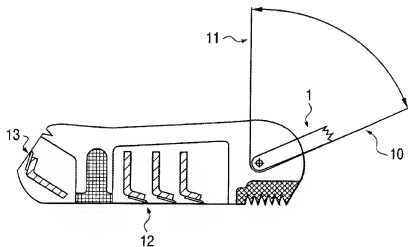
The text of Rozenkranc is silent in this regard – and the Figures show a preferred embodiment that is completely different than Applicant's geometry.

Applicant's claimed geometry allows for more a better shaving experience than Rozenkranc's by providing a razor that is more maneuverable, easier to handle, and generally more efficacious. In fact, it appears that Rozenkranc must allow his razor to rotate through large angles with respect to the handle (see, for example, the difference in angle between the razor and handle in Rozenkranc Figures 2 and 2A as compared to Rozenkranc Figures 3 and 3A; see also Rozenkranc Figure 4) in order to allow a transition from broad area to trim shaving.



In order to use the trimming features of Rozenkranc, the razor head must quite literally “flop around” on the handle as illustrated by elements 1, 10 and 11 in Figure 4 of Rozenkranc:

FIG. 4



2. The Market Provides Evidence of the Distinct Superiority of Applicant's Configuration as Compared to Rozenkranc

As further evidence of the significant advance that Applicant's configuration represent's over Rozenkranc, Applicant notes that the Rozenkranc patent was assigned to The Gillette Company according to an assignment recorded at Reel 014754, Frame 0669 on June 22, 2004 (well after Applicant's priority and filing dates). Following that assignment, Gillette did in fact begin marketing a multi-blade razor having a single trim blade on a back side thereof in 2006 – this razor is known in the marketplace as the Gillette Fusion. [See, e.g., http://en.wikipedia.org/wiki/Global_Gillette.] ***The Gillette Fusion, despite being marketed by the owner of the Rozenkranc patent, does not use the Rozenkranc geometry, but instead uses Applicant's geometry and handle configuration.*** While handling the Gillette Fusion razor makes this much more clear, it can be seen from the picture below that the included angle between the working planes in the Gillette Fusion razor is approximately 90 degrees – not the much smaller angle of Rozenkranc that requires a “flopping” razor head:



This picture also shows quite clearly that the Gillette Fusion copies the thin leading edge blade guard for the trim blade and the convexly curved handle that are claimed in the present application as discussed below. This commercial activity by the owner of the Rozenkranc patent evidences a recognition that the Rozenkranc design has many shortcomings that are overcome by Applicant's claimed design.

In addition, Gillette's primary competitor, Schick, has, in response to the Gillette Fusion, begun marketing its own multi-blade razor with a trim blade – this razor is marketed under the name "Schick Quattro Titanium Trimmer." Like the Gillette Fusion, the Schick Quattro Titanium Trimmer uses Applicant's geometry with approximately a 90 degree angle between the working planes and Applicant's preferred handle configuration as can be somewhat seen in this picture of the razor:



As with the Gillette Fusion, this picture shows quite clearly that the Schick Quattro also copies the thin leading edge blade guard for the trim blade and the convexly curved handle that are claimed in the present application as discussed below.

There can be no doubt that Applicant's claimed geometry and configuration represents a significant advance over the razor of Rozenkranc. The Examiner admits that Rozenkranc is

different, and that it does not teach or suggest Applicant's configuration – and the marketplace has confirmed that Applicant's invention provides a better shaving experience than Rozenkranc.

3. The Examiner's Reliance on *In re Aller* and WO94/26476 is Inappropriate

There is no teaching, suggestion, or rationale of record for converting Rozenkranc into Applicant's claimed invention. In order to make out an obviousness rejection, the Examiner must provide clear reasons why the person of ordinary skill would make the leap from the prior art (Rozenkranc) to the claims. *See In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) ("[R]ejections on obviousness grounds *cannot be sustained by mere conclusory statements*; instead, there *must be some articulated reasoning with some rational underpinning* to support the legal conclusion of obviousness") (emphasis added). Without such rational underpinning, the Examiner easily falls prey to improper hindsight reasoning:

A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. *See Graham*, 383 U.S., at 36, 86 S. Ct. 684, 15 L. Ed. 2d 545 (warning against a "temptation to read into the prior art the teachings of the invention in issue" and instructing courts to "'guard against slipping into the use of hindsight'"). *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1742 (Apr. 30, 2007).

Instead of providing this required rationale, the Examiner cites to *In re Aller* and asserts that any configuration is obvious because any configuration can be created:

However, in regards to claims 21 and 40, Rozenkranc remains silent with respect to the first and second working planes intersect at an angle between about 75° and 135°. WO 94/26476 provides evidence that it is old and well known in the art of double sided razor cartridges to alter the intersection angle between the two working planes (Figs. 5A, 5B, and 6).

In light of WO 94/26476, Rozenkranc does not disclose the first and second working planes intersect at an angle between about 75° and 135° but it would have been obvious to one having ordinary skill in the art at the time the invention was made to intersect the plane angles at an angle between about 75° and 135°. since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It is noted that there are a limited number of angles available to a person skilled in the art for the

working plane intersection angle and it would have been obvious to one of ordinary skill in the art to have experimented to as shown by WO 94/26476 to increase this working plane intersection angle. It is not inventive to discover the optimum or workable ranges by routine experimentation. Therefore, it would have been an obvious to one of ordinary skill in the art to have modified the device of Rozenkranc to obtain the specified angle. The claim would have been obvious because a person of ordinary skill has good reason to pursue the known options within technical grasp. If this leads to the anticipated success, it is likely the product is not of innovation but of ordinary skill and common sense.

The reliance by the Examiner on *In re Aller* is inapt. As the MPEP (see MPEP § 2144.05

II. B. “Only Result-Effective Variables Can Be Optimized”) notes:

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)

The Examiner does not refer to a result effective parameter, and Rozenkranc does not recognize or suggest that the angle between the working planes is result effective. Rather, Rozenkranc ignores the angle between the working planes and focuses his attention on the angle between the blades. Part of the inventiveness of Applicant’s claimed invention is his recognition that carefully choosing the angle between the working planes would result in a razor that was easier to use and more effective for both shaving and trimming. There is no suggestion in the art or from any other source that this parameter would be result-effective.

Apparently to address this problem (which Applicant raised in prior responses to Office Actions), the Examiner now cites for the first time WO 94/26476, an irrelevant reference, for the proposition that it is known in the art that the configuration of a trimming working plane and a broad shaving working plane are result effective parameters under *In re Aller*. To the contrary, that such an irrelevant reference is applied in this way indicates quite clearly that there is nothing in the long history of razor prior art that suggests Applicant’s invention.

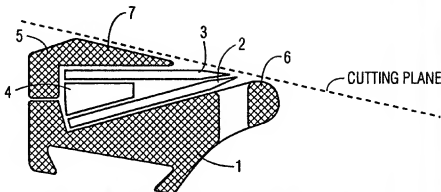
WO 94/26476 relates to a razor for use in shaving having two blades. The inventors posit that prior two blade razors do not work effectively, and that angling the blades with respect to

each other will result in a closer more comfortable shave. This purpose of the reference is clear from the Abstract and Figure on its front page:

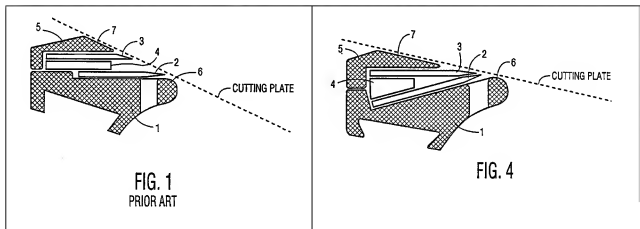
(54) Title: RAZOR BLADE UNIT

(57) Abstract

A wet shaving head includes parts (6, 7) that define a cutting plane, a leading blade (2) mounted at an angle that is optimum for lifting before substantially cutting through the hair, and a trailing blade (3) mounted at an angle that is optimum for cutting a lifted hair without substantially further lifting it. The blades (2, 3) are arranged so that the trailing blade (3) begins to cut the hair before the leading blade (2) completes its cutting action on the lifted hair. The trailing blade (3) has its cutting edge mounted close to the cutting plane and the leading blade (2) has its cutting edge mounted at the same or greater distance from the cutting plane.



This purpose of the reference is even more clear when considering the prior art as shown in Figure 1 of the reference with comparable Figure 3 of the reference.



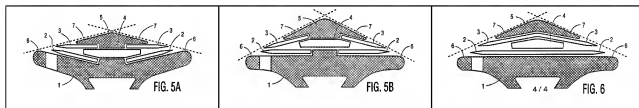
The clear goal of this reference is to configure two blades on a single cutting plate or plane in order to provide better shaving. The text of this reference focuses exclusively on the relationship between blades themselves, and between the blades and the cutting plate or plane. There is never any consideration of angling or configuring the cutting plate or plane – and there is never a discussion about trimming. In fact, WO94/26476 would never address the issue of trimming because according to its invention, there would be no need to provide a trim blade group. As has been noted above, the need for a trim blade group has been driven by the increasing number of blades provided in the broad area shaving group. As this number of blades has grown from two

to three to four and even to five, the broad area shaving blade group has grown more and more bulky – rendering it unable to perform in the areas in which Applicant's trim blade group performs. According to WO94/26476, however:

[R]eal shaving quality improvement does not result from increasing of number of razor blades as shown in European Patent No. 0336355. [Page 3, lines 8-9.]

The goal of WO94/26476 is to improve shaving using only two blades and not to increase the number of blades – not only does WO94/26476 not recognize a need for a trim blade group, but it would eliminate any need for a trim blade group by providing a closer and safer shave with only two blades in the broad area shaving blade group.

How, then, is this reference used in the rejection? The Examiner points to these Figures:



and says that, “it would have been obvious to one of ordinary skill in the art to have experimented to as shown by WO 94/26476 to increase this working plane intersection angle.” This statement is incorrect.

WO 94/26476 does not show experimentation with working plane intersection angles as recited in the claims for at least two reasons. First, there are not first and second working planes as recited in claim 21. In claim 21, the first and second working planes are defined by first and second blade groups that are configured for broad area shaving and trimming, respectively. The two working planes are for different purposes and are defined by blade groups having different configurations. The goal of WO 94/26476 in these figures is to identify facile manufacturing approaches for producing two identical “first blade groups.” [Page 5.] The reason one would do this is so that the razor cartridge will last twice as long – that is, if there are two identical groups of blades for shaving, the razor cartridge will have a useful life for shaving up until both groups of blades become dulled. The two sided razors illustrated in these figures are not relevant to any aspect of claim 21.

In addition, rather than indicating that the relationship between the two unidentified (and unmentioned in the text) shaving plates or planes in these figures is a result effective parameter, WO 94/26476 implies that the relationship is wholly irrelevant. These planes and the their configuration is completely ignored by the reference and appear to be merely defined by whatever manufacturing process happens to be most efficient. That is, instead of suggesting that the relationship between two planes is result effective and should be optimized to achieve the best result, the reference implies that the relationship is irrelevant.

Finally, the Examiner is barred by law from assuming precise dimensions from figures that are not expressly drawn to scale. The Federal Circuit has made it very clear that arguments based on patent drawings that are not expressly made to scale are unavailing. *Nystrom v. Trex Co., Inc.*, 424 F.3d 1136 (Fed. Cir. 2005). According to the Court: “it is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue.” *Id.* at 1149. Here, there is no indication in WO 94/26476 that its drawings are made to scale. In fact, the dimension that the Examiner relies upon are not mentioned at all. The Examiner’s estimation based on drawings not made to scale is not a teaching in the art.

4. Claim 30, Describing a Concave Handle Curvature, is Further Patentable Over Rozenkranc

Claim 30, which depends ultimately from claim 21, recites that the handle is curved at its end attached to the razor with the curve being concave on the same side as the first blade group. This claimed feature can be seen, for example, in Figures 1 and 2 of the application. The Examiner asserts that this feature is shown in Figure 2 of Rozenkranc. Applicant respectfully submits that Rozenkranc shows the opposite.

Figure 2 of Rozenkranc is reproduced below with an arrow provided to point to a curved portion of the Rozenkranc handle that is provided on the end attached to the razor:

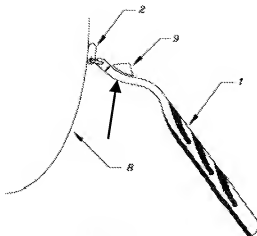
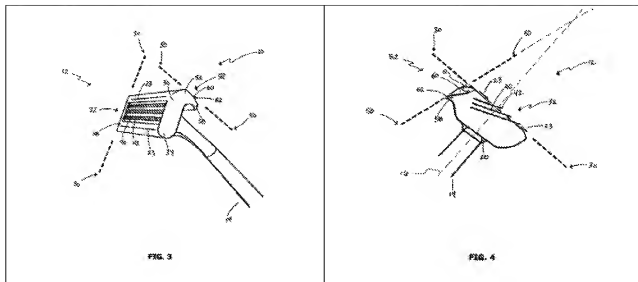


FIG 2

As is clearly shown in this Figure, the curve on the end of the handle attached to the razor is *convex* on the side of the first working plane – the opposite of what is recited in the claims. The curve is concave on the opposite side (shown by reference to element 9) – on the same side as the second working plane. Applicants geometry, especially when combined with the recitations of claim 21, provide improved comfort and ease of use over Rozenkranc for both broad area and trim shaving. Rozenkranc does not disclose, teach or suggest the features of claim 30, nor its combination with the features of claim 21, nor the advantages that these features provide. In addition, as noted above, the marketplace has confirmed that this aspect of Applicant's design results in a better shaving experience. Accordingly, claim 30 is separately patentable over Rozenkranc for the reasons stated.

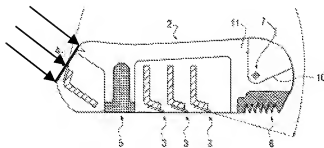
5. Claims 31 and 40, Describing a Thin Leading Edge Blade Guard for the Trim Blade Group, are Further Patentable Over Rozenkranc

Claim 31 recites that the secondary blade group has a leading-edge blade guard having a thin profile to allow the distance between the cutting blade and the individual's skin to be optimally minimized to facilitate shaving in confined hard-to-reach areas of the face. Claim 40 depends from independent claim 41, which also includes this recitation, while claim 40 adds to claim 41 the same included angles between the working planes that is recited in claim 21. The thin profile leading edge blade guard feature is described in the application, for example, at paragraphs 49 and 57 (as filed, these correspond to paragraphs 85 and 93 as published), as well as by element 58 in Figures 3 and 4:



As can be seen in these and other figures in the application, the leading edge blade guard for the second blade group has a thin profile so that the blade can be maneuvered readily into confined hard-to-reach areas.

In sharp contrast, Rozenkranc provides a broad second working plane and places the trimming blade on the back half of the plane, leaving more than one half of that broad plane to act as a guard, which will in turn prevent the use of that blade to trim in confined hard-to-reach areas. To illustrate this point, Applicant has modified Figure 1 of Rozenkranc below to provide a darkened line to indicate the second working plane, an arrows to indicate its leading and trailing edges:



The broad area from the trim blade 4 to the leading edge of the second working plane in Rozenkranc stands in sharp contrast to the thin profile guard 58 provided in Applicant's Figure 4 and other Figures in the application. Rozenkranc provides no disclosure, teaching or suggestion of a thin profile leading edge blade guard for the trim blade group as recited in Applicant's claim 31. This forms still another basis for the patentability of this claim over Rozenkranc.

In addition, as noted above, the market place has confirmed the superiority of Applicant's claimed design and the shaving experience it provides.

Applicant addresses the thin blade guard in greater depth with respect to claim 41 below, and those arguments are incorporated here by reference as they apply with equal force to claim 31.

C. Neither Claim 41 Nor the Claims Depending Therefrom Are Anticipated By Rozenkranc under 35 U.S.C. § 102

Specifically with regards to claim 41, the Examiner states:

Specifically, the Examiner states:

In regards to claim 41, Rozenkranc discloses the same invention including a razor system providing both broad area shaving and trim shaving blade groups within a single cartridge (2), an elongate handle defining a handle axis (1), the razor cartridge disposed on the handle (Fig. 2) having a first blade group having a plurality of blades configured to provide a broad area shaving in a first working plane (3), the first plane being defined by a blade platform having leading and trailing glide surfaces (1wp extends from 5 to 6), the first working plane intersects the handle axis (Fig. 2) and the plurality of razor blades being provided at an acute angle to the first working plane (3 and 1wp), a second blade group having at least one razor blade (4) configured to provide trim shaving in a second work plane (2wp), the second working plane being defined by a blade platform having leading (400) and trailing surfaces (401), the second working plane intersects the handle axis (Fig. 2a) and the at least one razor blade being provided at an acute angle to the second working plane (4 and U). the first and second working planes intersect each other so as to define a line of intersection that is substantially transverse to the handle axis (Fig. 2), the first and second working planes intersect at an included angle between about 0° and 150° (1wp and 2wp clearly form an angle that is greater than 0° and less than 90°, also see page 13 of applicant's remarks in the most recent response), the second blade group includes a blade 'platform (400 extending to 401) and a leading-edge blade guard (400a). and *the leading-edge blade guard having a thin profile to allow a distance between the at least one razorblade and the skin to be optimally minimized (TP)* [November 27, 2007 Final Office Action at pp. 2-3.]

In response to Applicant's arguments, the Examiner has also asserted:

Using Appendix A item 51 is clearly thinner than item 6 therefore it incorporates a thin profile. **The term "thin" is a relative term.** Meaning it must be compared to another item to allow one to determine what "thin" means. Without a comparison (i.e. wall A is thinner than wall B) anything can be considered thin. Applicant is trying to argue that area of Rozenkranc incorporating blade 4 is broader than the area of the instant application incorporating blade 60 however, has not included any structural limitations into the claim preventing the examiner's interpretation of a thin profile. For example, an elephant is a big animal but a blue whale is a bigger animal, does that no longer allow one to consider the elephant a big animal. Without the comparison, the elephant and the blue whale are both big animals but with a comparison a blue whale is the big animal and the elephant is the smaller animal. The same thing goes with the term "thin". Applicant thin profile section may be thinner than the same section in Rozenkranc but without a structural comparison both can be considered thin. [May 18, 2007 Office Action at pp. 7-8.]

1. Rozenkranc Does Not Provide a Thin Blade Guard

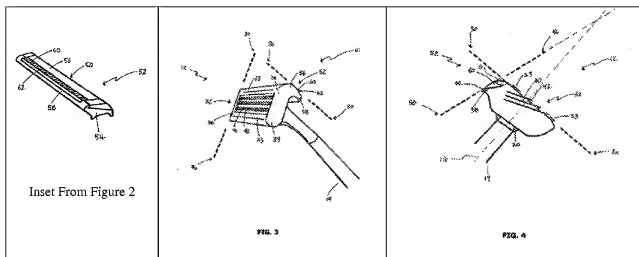
In making this argument, the Examiner takes the term "thin profile" out of context from within the claim in which it is recited. The claim recites a "second blade group," where that second blade group includes at least one razor blade, a blade platform and a leading-edge blade guard. Then the leading-edge blade guard is said to have "a thin profile to allow the distance between the at least one razor blade and an individual's skin to be optimally minimized to facilitate shaving in confined hard-to-reach areas of the individual's skin." Placed in this context, the comparison is clear, the leading-edge blade guard must have a thin profile as within the second blade group. The purpose of providing the "thin profile" on the leading edge blade group is to "allow the distance between the cutting blade and the individual's skin to be optimally minimized to facilitate shaving in confined hard-to-reach areas of the face."

Thinness is recited in context – that is, with respect to the second blade group. The leading-edge blade guard has a thin profile with respect to the blade group within which it is found. Applicant's representative sought to clarify the application of the term "thin profile" during the Interview. [See, Applicant's April 23, 2007 Amendment and Response to Final Office Action at pp. 5-6.] As discussed in the Interview, Applicant's amended claim 41 in an attempt to clarify this relationship. Applicant finds this relative thinness to be perfectly clear – however, the Examiner has been unable to agree to any formulation of the language.

It is well established that, in the absence of a specific quantification of a parameter of an invention, the requirements of the parameter should be determined in light of the functional purpose of the invention, as expressed in the specification. In *Minnesota Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, for example, the Federal Circuit was asked to construe the terms “lubricant” and “pre-lubricated” in the claims of the relevant patent. 976 F.2d 1559, 1565-67 (Fed. Cir. 1992). The background section of the patent described the problems in the prior art, *i.e.* the tackiness of a casting resin made molding a cast to a patient’s limb difficult, and the patent specification identified how the relevant invention overcame this problem by using lubricants to assist in the casting process. *Id.* at 1566. Although the specification did not quantify the amount of lubricant to be used in numeric terms, the court determined that the claimed term “lubricated” meant “sufficient” lubricant to serve the invention’s purpose. *Id.* at 1567 (“[t]he amount of lubrication required is laid out in the specification and should be sufficient to achieve the fundamental purpose of the invention – the ability to smooth and rub the casting materials during molding without the resin and tape sticking to the applicator’s hands”).

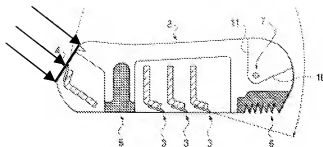
Similarly, in *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, the Federal Circuit adopted a functional definition, construing the term “smooth” as used in a patent claim for a contact lens. 796 F.2d 443 (Fed. Cir. 1986). The court looked to the patent specification and the prosecution history and found that “‘smooth’ meant that ‘the edges of the craters neither inflame nor irritate the eyelid of the lens wearer.’” *Id.* at 450. In rejecting the assertion that “‘smooth’ means absolutely ridge-free,” the Federal Circuit vacated the district court’s opinion that the lenses were not smooth because they did not appear smooth under a scanning electron microscope. *Id.* at 450-51. The correct standard held by the Federal Circuit was that “smooth means smooth enough to serve the inventor’s purposes, *i.e.*, not to inflame or irritate the eyelid of the wearer or be perceived by him at all when in place.” *Id.* at 450. *See also Laitram Corp. v. Cambridge Wire Cloth Co.*, 863 F.2d 855, 858 (Fed. Cir. 1988) (defining “slightly greater” spacing in terms of its purpose to “minimize bending and maximize shear” as described in the patent prosecution history); *Trinity Ind., Inc. v. Road Sys., Inc.*, 121 F.Supp.2nd 1028, 1045 (E.D. Tex. 2000) (“‘flattening’ means a degree of flattening sufficient to dissipate some of the energy of an impacting vehicle” where “the function of the squeezing extruder throat is to employ flattening to dissipate some of the energy of an impacting vehicle.”

Here, in addition to having the function expressly described in the claim, this feature is further described in the application, for example, at paragraphs 85 and 93 (as published). This feature is also illustrated in Figures 2, 3 and 4 of the application, where element 58 is the leading-edge blade guard:



Giving the leading-edge blade guard 58 a thin profile allows the trim blade to be placed forward in the second working plane, thereby improving its trimming ability. As can be seen in these and other figures in the application, this thin profile for the leading edge blade guard for the second blade group results in the leading edge of the second working plane – the distance between the cutting blade and the individual’s skin – being optimally minimized so that the blade can be maneuvered readily into confined hard-to-reach areas.

In sharp contrast, Rozenkranc provides a broad second working plane and places the trimming blade on the back half of the plane, leaving more than one half of that plane to act as a guard, which will in turn prevent the use of that blade to trim in confined hard-to-reach areas. To illustrate this point, Applicant has modified Figure 1 of Rozenkranc below to provide a darkened line to indicate the second working plane, and arrows to indicate its leading and trailing edges as well as the location of the cutting edge in that plane:



The broad blade guard area from the trim blade 4 to the leading edge of the second working plane in Rozenkranc stands in sharp contrast to the thin profile guard 58 provided in Applicant's Figure 4 and other Figures in the application.

Rozenkranc provides no disclosure, teaching or suggestion of a thin profile leading edge blade guard for the trim blade group as recited in Applicant's claim 41. Accordingly, this claim is patentable over Rozenkranc.

D. Neither Claim 41 Nor the Claims Depending Therefrom Are Indefinite under 35 U.S.C. § 112

The Examiner states:

In regards to claim 41 line 18, the phrase "the second blade group further includes a blade platform" is unclear. It is uncertain if this blade platform is the same structure previously disclosed on lines 11-12 or if it is another blade platform.

Applicant submits that this language is sufficiently clear, however, in the interest of simplifying the issues on appeal, Applicant has submitted an amendment for the purpose of addressing this issue.

VIII. CONCLUSION

For the reasons noted above, Appellant submits that the pending claims define patentable subject matter. Accordingly, Appellant requests that the Examiner's rejection of these claims be reversed and that the pending application be passed to issue.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Ronald E. Cahill", enclosed within a rectangular border.

Dated: November 25, 2008

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CLAIMS APPENDIX

1-20. (Canceled).

21. (Previously Presented) A single razor cartridge for use with a handle for providing both broad area shaving and trim shaving blade groups within the single cartridge, comprising:

the razor cartridge defining a handle axis;

a first blade group provided on the razor cartridge and having a plurality of razor blades configured to provide broad area shaving in a first working plane, the first working plane being defined by a blade platform having leading and trailing glide surfaces, wherein the first working plane intersects the handle axis and the plurality of razor blades in the first blade group are angled at an acute angle with respect to the first working plane in a direction of broad area shaving; and

a second blade group provided on the razor cartridge and having at least one razor blade configured to provide trim shaving in a second working plane, the second working plane being defined by a blade platform having leading and trailing glide surfaces, wherein the second working plane intersects the handle axis and the at least one razor blade in the second blade group is angled at an acute angle with respect to the second working plane in a direction of trim shaving;

wherein the first and second working planes intersect each other so as to define a line of intersection that is substantially transverse to the handle axis and the first and second working planes intersect at an included angle between about 75 degrees and 135 degrees.

22. (Original) The razor cartridge of claim 21, wherein the blades in the first blade group are parallel to each other.

23. (Canceled)

24. (Original) The razor cartridge of claim 21, wherein the line of intersection is orthogonal to the handle axis.

25. (Previously Presented) The razor cartridge of claim 21, wherein the handle is attached to the razor cartridge, at least a portion of the handle extending along the handle axis.

26. (Original) The razor cartridge of claim 25, wherein the first and second working planes are configured to allow conversion by a user of the razor cartridge from broad area shaving to trim shaving by rotating the handle 180 degrees about the handle axis.

27. (Original) The razor cartridge of claim 25, wherein at least a portion of the handle is symmetric to facilitate handling of the handle for either broad area shaving or trim shaving.

28-29. (Canceled)

30. (Previously Presented) The razor cartridge of claim 25, wherein the handle is elongated and has a curve at an end attached to the razor cartridge, the curve being concave on the same side as the first blade group.

31. (Previously Presented) The razor cartridge of claim 21, wherein the secondary blade group has a leading-edge blade guard having a thin profile to allow a distance between the cutting blade and the individual's skin to be optimally minimized to facilitate shaving in confined hard-to-reach areas of the face.

32. (Previously Presented) The razor cartridge of claim 31, wherein the secondary blade group has a single razor blade.

33-39. (Canceled)

40. (Previously Presented) The razor system of claim 41, wherein the first and second working planes intersect at an included angle between about 75 degrees and 135 degrees.

41. (Previously Presented) A razor system for providing both broad area shaving and trim shaving blade groups within a single cartridge, comprising:

an elongate handle defining a handle axis; and

the razor cartridge disposed on the handle and having:

a first blade group having a plurality of razor blades configured to provide broad area shaving in a first working plane, the first working plane being defined by a blade platform having leading and trailing glide surfaces, the first working plane intersecting the handle axis and the plurality of razor blades being provided at an acute angle to the first working plane in a direction of broad area shaving; and

a second blade group having at least one razor blade configured to provide trim shaving in a second working plane, the second working plane being defined by a blade platform having leading and trailing surfaces, the second working plane intersecting the handle axis and the at least one razor blade being provided at an acute angle to the second working plane in a direction of trim shaving;

wherein the first and second working planes intersect each other so as to define a line of intersection that is substantially transverse to the handle axis and the first and second working planes intersect at an included angle between about 0 degrees and 150 degrees; and

wherein the second blade group further includes a blade platform and a leading-edge blade guard, the blade platform and blade guard being provided along with the at least one razor blade on the second working plane, the leading-edge blade guard having a thin profile to allow a distance between the at least one razor blade and an individual's skin to be optimally minimized to facilitate shaving in confined hard-to-reach areas of the individual's skin.

42. (Previously Presented) The razor system of claim 41, wherein the handle and the first and second working planes are configured to allow conversion by a user of the razor cartridge from broad area shaving to trim shaving by rotating the handle 180 degrees about the handle axis.

43. (Previously Presented) The razor system of claim 42, wherein at least a portion of the handle is symmetric to facilitate handling of the handle for either broad area shaving or trim shaving.

44. (Previously Presented) The razor system of claim 43, wherein the handle has a curve at an end attached to the razor cartridge, the curve being concave on the same side as the first blade group.

45. (Canceled)

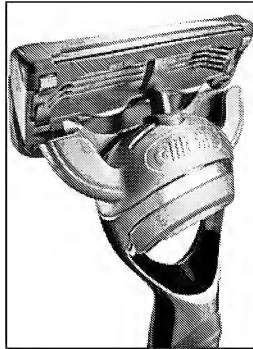
EVIDENCE APPENDIX

Applicant have submitted the following as evidence in a separate paper pursuant to 37 CFR 41.37:

The **Gillette Fusion** is a five-bladed razor released in 2006. There are two different versions of the Fusion available: the *Gillette Fusion*, and the *Gillette Fusion Power*. All share the characteristic five blades on the front, and a single sixth blade on the rear that acts as a "precision trimmer". In addition, the Fusion Power is battery powered and emits "gentle micropulses" that are claimed to increase razor glide. ⁽¹⁾ In February 2007, the *Fusion Power Phantom (Stealth in UK)* was released which features a redesigned handle and a darker color scheme than the original Fusion Power⁽²⁾. In February 2008, Gillette released another revision, the *Fusion Power Phenom*, with a new blue and silver color scheme. ⁽³⁾ [copied from http://en.wikipedia.org/wiki/Gillette_Fusion on today's date.]

Applicant submits that this information is a public document commonly used as a source of information and that it is reliable as such.

The following image was published by the New York Times at http://www.nytimes.com/2005/09/15/business/media/15adco.html?_r=1 as a representation of a Gillette Fusion razor:



This information is still available at the above referenced URL as of this date.

In addition, the following figure has been published at <http://www.gizmosforgeeks.com/2008/08/15/review-schick-quattro-titanium-with-trimmer/> as a representative image of the Schick Quattro Titanium Trimmer:



This information is still available at the above referenced URL as of this date.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

1765395.1